

Sample Calculation for EBDC Exposure from Cigarettes
Containing 0.2 ppm⁽¹⁾

0.2 ppm = 0.2 ug/g = 0.2 ug/cigarette

0.2 ug/cigarette x 20 cigarettes/day = 4 ug/day/pack

4 ug/day/pack/70 kg man = 0.057 ug/kg/day = 0.000057
mg/kg/day

for a one pack per day smoker (assuming 100% transfer
to mainstream smoke)

$$\frac{0.005 \text{ mg/kg/day}}{0.000057 \text{ mg/kg/day/pack}} = 88 \text{ packs/day} = 1760$$

cigarettes/day

This means that a person would have to smoke 1760
cigarettes/day to reach the equivalent of the ADI.
(Actually, it would be 17,600 cigarettes/day, since
realistically, a smoker would be exposed to only
approximately 10% of pesticide residue in the cigarette)

(1) Calculation based on proposed Italian regulation.